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(54) Title: A METHOD AND SYSTEM FOR EFFECTIVELY PERFORMING EVENT DETECTION IN A LARGE NUMBER
OF CONCURRENT IMAGE SEQUENCES

(57) Abstract: Method and system for performing event detection and object tracking in image streams by installing in field, a set
of image acquisition devices, where each device includes a local programmable processor for converting the acquired image stream
that consist of one or more images, to a digital format, and a local encoder for generating features from the image stream. These
features are parameters that are related to attributes of objects in the image stream. The encoder also transmits a feature stream,
whenever the motion features exceed a corresponding threshold. Each image acquisition device is connected to a data network
through a corresponding data communication channel. An image processing server that determines the threshold and processes
the feature stream is also connected to the data network. Whenever the server receives features from a local encoder through its
corresponding data communication channel and the data network, the server provides indications regarding events in the image
streams by processing the feature stream and transmitting these indications to an operator.